

ern part, and extends north as far as the mouth of the Illinois River, where it has been collected by Professor W. E. Andrews. *Spermacoce glabra* Michx. extends northward along the rivers well into central Illinois. *Triadenum petiolatum* (Walt.) Britton is common in the cypress swamps of Johnson and Massac counties, and *Agrimonia pumila* Muhl. in the upland woods of the Ozark region.

OHIO STATE UNIVERSITY, COLUMBUS.

## SHORTER NOTES

**Hymenoxys insignis** — (*Actinella insignis*, A. Gray ; S. Watson, Pr. Am. Acad., 18: 109). In my recent paper on *Hymenoxys* (Bull. Torrey Club, 31: 461. S 1904), I omitted this species, as I had seen only some fragments of a head, and was uncertain whether it was really of this genus. I have now examined the type sheet (from Lerios, 15 leagues E. of Saltillo, Mexico, 10,000 ft., *Palmer*) in the Gray Herbarium, and am satisfied that the plant is a *Hymenoxys*, most nearly allied to *H. chrysanthemoides*, but quite distinct.

T. D. A. COCKERELL.

**RYNCHOSPORA PRINGLEI** Greenman. — This species, published in Proc. Am. Acad. 39: 69. 25 S 1903, is the same as *R. Indianolensis* Small, Fl. S. E. U. S. 193. 22 J1 1903. Mr. Greenman's specimens came from Zamora, Michoacan (Pringle, 8642) and Dr. Small's from Indianola, Texas (Ravenel). The species is next to *R. scutellata* Griseb. Pl. Cub. 246. 1866, to which it has been referred by Mr. C. B. Clarke, but it differs from that by its congested inflorescence with several or many spikelets in the clusters, and seems to me to be distinct.

N. L. BRITTON.

**NOTES ON CUBAN PLANTS.** — *Dichrostachys nutans* (Pers.) Benth., an African tree, naturalized in Cuba, though apparently not heretofore reported from the West Indies, was observed in March, 1903, by Dr. Britton and the writer, forming dense thickets, covering several acres, almost to the exclusion of all other plants, on the grounds surrounding an old Spanish fort near the mouth of the Bueyvacá, on the Bay of Matanzas and several

miles east of the old town of the same name. Later, the writer again found it, abundantly forming thickets in the brickyard district just south of Havana. These thickets were strongly suggestive of the *Crataegus* "formations" so abundant in similar places about Pittsburg, Pa. It was also collected in flower by Dr. Britton and Percy Wilson, the following September at Bueyvacá and still further east, at Saguna.

Although it seems not to have been reported from the West Indies and was not observed by us as cultivated in Cuba, it has been in cultivation, according to Duss (no. 2040), on Guadeloupe Island under the name of "*Acacia Lundea* Roxb."

J. A. SHAFER.

NEW YORK BOTANICAL GARDEN.

A PECULIAR PEA SEEDLING. — In handling the thousands of seedlings used by classes in our large city schools one comes across some queer freaks. The pea seedling shown at the right of the accompanying illustration was brought in by a boy in one



of my classes. At the left is a normal seedling. The peculiarity consists in the fact that both root and stem were negatively geotropic and both grew in the same direction.

When the plant reached me it was in excellent condition and there is no possibility of an artificial twist.

A. J. GROUT.

BOYS' HIGH SCHOOL, BROOKLYN.

A NEW BAHAMAN EUPHORBIA. — While on a trip from New Providence to the Bimini Islands, anchor was cast for the night in the creek separating the Joulter Cays lying north of the island of Andros. The opportunity to examine into the flora of these xerophytic cays was an excellent one and the results proved highly interesting. One of the first patches of vegetation to attract the attention was what appeared to be a growth of *Euphorbia buxifolia* Lam. in a new environment, namely the interior, separated from the sands of the beach by a high bluff of coralline rock. Closer examination of the plants removed their likeness to the species mentioned, and later study proved the species to be heretofore unknown. The characters :

***Euphorbia Cayensis* sp. nov.**

§ Chamaesyce. Annual, densely white-canescens. Stems stout, ligneous, multinodal, branching from below, 2–3 dm. high, spreading above : leaves thick, oval, obliquely cordate at the base, entire, canescent alike on both surfaces, 4–6 mm.  $\times$  3–4 mm., short-petioled ; petioles 1–1.5 mm. : involucre campanulate, short-peduncled, 1.5 mm., canescent, bearded in the throat ; appendages lineal, hardly distinguishable ; glands green, transversely oblong, thick, tumid, 0.7 mm. broad ; false gland a large deltoid tooth of the involucre : capsule canescent, 2 mm., the carpels bluntly keeled : seeds pinkish-ashen, somewhat quadrilaterally ovoid, strongly keeled on the dorsum, the facets slightly anastomose-ridged.

Habitat : Joulter's Cays, Bahamas, April 11, 1904 ; *Mills-paugh* 2295. Only a few fruits matured. Type in herb. Field Columbian Museum, sheet no. 156261. Cotypes in herb. New York Botanical Garden and herb. Krug & Urban, Berlin.

C. F. MILLSPAUGH.

FIELD COLUMBIAN MUSEUM, CHICAGO.

THE EFFECT OF ILLUMINATING GAS ON TREES AND SHRUBS. — Early in the spring of this year about three dozen bushes of *Rosa rugosa* were planted on both sides of the road near the stone piers at the entrance to the New York Botanical Garden, between the railroad bridge at 200th Street and the driving roads. Those in the southern half promptly died, while those on the north side have lived and are doing well. This fact coupled with

the death of the maple immediately beyond the southern pier has shown conclusively that it is due to soil saturation by illuminating gas, and not to the disturbance caused by the making of the road. The main that supplies the museum building crosses the bridge between the southern roadway and the foot-path and



View at the 200th Street Entrance of the N. Y. Botanical Garden, Bronx Park,  
October, 1904.

makes an angle a short distance beyond the dead maple shown in the accompanying photograph. Several times leaks have occurred at this point and been repaired, but the damage has been done and one of the four symmetrical and beautiful sugar maples has suffered in consequence.

ELIZABETH G. BRITTON.

N. Y. BOTANICAL GARDEN, October, 1904.

A NAME EXPLAINED. — The ericaceous genus "*Xolisma*," as it is rather erroneously written, obtains a conspicuous place under its rightful name, in the second volume of Britton and Brown's Illustrated Flora, where, on page 569 the name is noted as "unexplained." The term is Greek, with the meaning of lameness, or defectiveness; and the character of the genus, as to certain particulars as they are mentioned by Nuttall, whose work Rafin-

esque was reviewing when he proposed "*Xolisma*," suggests a name of such import. The corollas in the genus are both so diminutive and so colorless compared with those of allied genera, that the inflorescence looks more like a cluster of small undeveloped flower buds than a cluster of developed flowers. The pedicels in kindred genera are bracted ; in this, bractless. Again, one member of each floral circle is commonly suppressed, so that the flower is often tetramerous rather than pentamerous as in related groups. The awns of the anther, otherwise almost universally characteristic of those of ericaceous shrubs, are wanting in this genus ; and lastly the stigma, usually prominent enough in such plants, is almost obsolete here. Without any doubt, some or all of these six characteristic deficiencies that mark the inflorescence and flowers of Nuttall's *Lyonia*, indicated to the keen intellect of Rafinesque the name he gave as a substitute for the Nuttallian homonym.

My investigations leading to this apparent explanation began in my knowledge of some of Rafinesque's own deficiencies as a writer. I knew, for example, that his X's are ambiguous. He seems never to have distinguished between the English X and the Greek *X*, which latter is Ch, pronounced like K. I do not know how the readers of the new books, in which I am always glad to see the name, pronounce it. But I know that Rafinesque must have pronounced it Kolisma, and also that he ought to have written it not *Xolisma* but *Cholisma* ; and the latter is the way that I should both write it and have it printed, if occasion came.

Possibly there may be other "X" names by the same author, in which that letter ought to have been represented by the Ch. However, I do not recall any such at this moment, nor have I time to examine indexes. But in scanning the pages of a theological brochure in which this same author displays more or less learning, I lately encountered the words "Xrist" "Xristians"; these illustrating the ambiguity of his X's elsewhere than in names of genera.

EDW. L. GREENE.

U. S. NATIONAL MUSEUM, WASHINGTON, D. C.



EXOGENOUS ORIGIN OF ANTHERIDIA IN ANTHOCEROS. — On pages 436–438 of volume 53 (1903) of the *Oesterreichische Botanische Zeitschrift*, Emma Lampa describes and figures organs which she calls antheridia of exogenous origin in *Anthoceros*. On first seeing this paper nearly a year ago, I was strongly impressed with doubts as to the antheridial nature of the organs described, and now that an American morphologist has quoted \* without criticism this rather heterodox observation of Frau Lampa's, it may be worth while, even at the risk of being wholly in error, to record some of the grounds for these doubts. In the first place, the species in which the exogenous antheridia are said to occur is *Anthoceros dichotomus*, a South-European species which, like the Australian *Anthoceros tuberosus* † and the Californian *Anthoceros phymatodes*, ‡ produces *tubers*, § somewhat similar in form and structure to the alleged antheridia figured by Frau Lampa. These tubers arise near the apices of the branches of the thallus, but later become ventral by the continued growth of the branch. Frau Lampa makes no mention of having observed *tubers*, but remarks that “Die Antheridien sassen gewöhnlich am Thallusende.” Furthermore, the pedicels of the “antheridia” as figured by Frau Lampa are very broad and stout, one of them showing a width of ten cells, whereas the pedicels of the antheridia in the genus *Anthoceros*, as figured and described by other observers || consist of no more than four rows of cells, showing a maximum width of only two or three in surface view

\* Davis, B. M. The Relationships of Sexual Organs in Plants. *Botanical Gazette*, 38 : 253. O. 1904.

† See Ashworth, J. H. On the Structure and Contents of the Tubers of *Anthoceros tuberosus* Taylor. Pp. 1–6, *pl. 2*. Mem. and Proc. Manchester Lit. and Philosoph. Soc. 41 : part I, no. 2. 1896.

‡ Howe, M. A. Bull. Torrey Club, 25 : 12–14. *pl. 324, 325*. 1898. Mem. Torrey Club, 7 : 179–183. *pl. 117, 118*. 1899.

§ A figure of the tubers of *Anthoceros dichotomus* in their fully developed condition is given by Goebel on p. 293 of his *Organographie der Pflanzen*.

|| Waldner, M. Die Entwicklung des Antheridiums von *Anthoceros*. *Sitzungsber. math.-naturwiss. Classe d. kaiserl. Akad. Wiss. Wien*, 75 : 87, 91, etc., *f. 6a, 7a, 8*. 1877.

Campbell, D. H. The Structure and Development of the Mosses and Ferns, 124. 1895.

Schiffner ; Eng. & Prantl, *Nat. Pflanzenfam.* 1<sup>3</sup> : 137. 1895.

and ordinarily but two in longitudinal section. Frau Lampa remarks that the ripe antheridia showed no essential differences whether they were exogenous or endogenous in origin, but an *Anthoceros* antheridium, whether exogenous or endogenous, with a stalk ten cells broad is a heresy that will naturally excite suspicion among students of the archegoniates.

MARSHALL A. HOWE.

## NEWS ITEMS

Dr. John K. Small, curator of the museums of the New York Botanical Garden, is again devoting several weeks to explorations in southern Florida.

Mr. Clifton D. Howe, assistant in botany in the University of Chicago, has been appointed instructor in botany in the Biltmore Forest School, Biltmore, North Carolina. He begins his new duties on January 1.

Annual meetings of the American Association for the Advancement of Science, of the Botanical Society of America, the Society for Plant Morphology and Physiology, and the American Mycological Society, will be held at Philadelphia, December 27-30, 1904.

Professor Nathaniel Lord Britton received the honorary degree of Doctor of Science from Columbia University October 31, at the Convocation held in connection with the 150th anniversary of the foundation of King's College. On the same occasion, the name of the chair now held by Professor L. M. Underwood was made the Torrey professorship of botany in honor of John Torrey, emeritus professor of botany in Columbia College from 1860 to 1873. The College of Physicians and Surgeons, in which Torrey was professor of chemistry and botany from 1827 to 1855, was made a part of Columbia University in 1891.